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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/761,301	01/16/2001	Ronald P. Schmidt	LOCK1880	3846
75	590 09/23/2002			
James E. Bradley			EXAMINER	
Bracewell & Patterson, LLP P.O. Box 61389			GALLAGHER, JOHN J	
Houston, TX	77208-1389		ART UNIT	PAPER NUMBER
			1733	10
			DATE MAILED: 09/23/2002	

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

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•	Ameliantina Na	wk-	
	Application No.	Applicant(s)	
Office Action Summary	Examiner	Group Art Unit	
-The MAILING DATE of this communication appear	rs on the cover sheet	t beneath the correspondence address-	
Period for Reply	ح		
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET 1 OF THIS COMMUNICATION.	TO EXPIRE	MONTH(S) FROM THE MAILING D	ATE
 Extensions of time may be available under the provisions of 37 CFF from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a If NO period for reply is specified above, such period shall, by defail Failure to reply within the set or extended period for reply will, by st Any reply received by the Office later than three months after the m term adjustment. See 37 CFR 1.704(b). 	reply within the statutory out, expire SIX (6) MONTHS atute, cause the application	minimum of thirty (30) days will be considered time S from the mailing date of this communication. on to become ABANDONED (35 U.S.C. § 133).	eły.
Status			
☐ Responsive to communication(s) filed on			·
☐ This action is FINAL.			
☐ Since this application is in condition for allowance except accordance with the practice under Ex parte Quayle, 193			ı
Disposition of Claims	120-390 1	4/1-4/5	
☐ Claim(s) / - ★ / ○ / ← / 3 / ← 산 ← 6 - 3 Of the above claim(s) / - ★ / ○ / ← / 3 3 - 3/	7 20-01-00	is are pending in the application.	
Of the above claim(s)	793 22	is/are withdrawn from considerati	ion.
□ Claim(s) 13 15-25 6-3 38-39	· · · · · · · · · · · · · · · · · · ·	is/are allowed.	
(Claim(s) 13 13 13 13 13 13 13 13 13 13 13 13 13	xe-x3 chax	is/are rejected.	
□ Claim(s) 1-4,0,0,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,			
Claim(s) 1-7, 10, 10, 15, 15, 15, 15, 15, 15, 15, 15, 15, 15	1-34 and-xc-		on
Application Papers		requirement	
	· —	ed disapproved.	
☐ The proposed drawing correction, filed on	• •		
☐ The proposed drawing correction, filed on is/are objection.	• •	ner	
☐ The proposed drawing correction, filed on is/are objected to by the Examiner.	• •	ner	
 ☐ The proposed drawing correction, filed on	• •	ner	
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 □ The proposed drawing correction, filed on	under 35 U.S.C. § 119 received. received in Application	9 (a)–(d). n No	
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☐ The proposed drawing correction, filed on	under 35 U.S.C. § 119 received. received in Application ts have been received al Bureau (PCT Rule 1	9 (a)–(d). n No d 7.2(a))	
 □ The proposed drawing correction, filed on	under 35 U.S.C. § 119 received. received in Application at have been received al Bureau (PCT Rule 1	9 (a)–(d). n No	
☐ The proposed drawing correction, filed on	under 35 U.S.C. § 119 received. received in Application its have been received al Bureau (PCT Rule 1	9 (a)–(d). n No d 7.2(a))	0-1 1

U.S. Patent and Trademark Office PTO-326 (Rev. 11/00)

Part of Paper No.

- Applicant's Preliminary Amendments (2), filed 31 August
 and 29 January 2002, have both been received and made of record.
- 2. Restriction to one of the following inventions is required under 35 U.S.C. § 121:
- I. Claims 1-4, 10, 12, 33-35 and 44, drawn to a 3-D woven textile preform, classified in Classes 428 and 442, respectively subclasses 345 and 286, respectively.
- II. Claims 13, 15-24, 26-32, 38-39, 42-43 and 45, drawn to a bonding process, classified in Class 156, subclass 306.9 or 313.
- 3. The inventions are distinct, each from the other because of the following reasons:

Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the method can be used to make laminated structures having non-woven, honeycomb or foam layers.

4. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as

shown by their different classifications, restriction for examination purposes as indicated is proper.

- 5. During a telephone conversation with Mr. Michael Alford on 13 August 2002 (call made by Examiner L. Salvatore, Art Unit 1771) a provisional election was made <u>WITH</u> traverse to prosecute the invention of Group II, claims 13, 15-24, 26-32, 38-39, 42-43 and 45. Affirmation of this election must be made by applicant in replying to this Office action. Claims 1-4, 10, 12, 33-35 and 44 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
- 6. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).
- 7. Before proceeding further, it is unclear whether applicant's intent is to have claims 27-31 depend from claim 26 as now presented OR to depend instead from claim 24 i.e. analogous to claims 18-19 depending from claim 16 rather than from claim 17.
- 8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one

year prior to the date of application for patent in the United States.

9. Claims 13, 15-16, 19-20, 23-25, 32 and 45 are rejected under 35 U.S.C. § 102(b) as being (clearly) anticipated by Rees et al.

Rees et al. disclose that it is known to form an adhesively bonded joint among component parts (of an e.g. aircraft wing) via a process wherein two fully cured FRP moldings are laminated together via the interposition therebetween of a COMBINATION of an uncured thermosetting resin impregnated (e.g. woven) fibrous material (i.e. cloth or fabric) AND (preformed) adhesive film i.e. (stated somewhat differently) wherein two cured FRP moldings are adhered to the SAME interposed uncured resin impregnated fibrous material utilizing (preformed) adhesive films. (Fig. 2, column 1 line 52 thru column 2 line 5, column 2 lines 8-43 (and N.B. lines 40-43), column 3 lines 27-52 (and N.B. lines 38-43)). All of the essential limitations of these claims are seen to be satisfied by this reference.

- 10. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art

to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

11. Claims 17, 21-22 and 26 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rees et al. in view of Scott.

Scott discloses that it is known to employ an (e.g. rubber) sheet for the purpose of equalizing the pressure applied (i.e. uniform pressure application) to a press charge during a lamination process involving the cure of a thermosetting resin adhesive (Fig. 2, column 2 lines 38-41, column 3 line 68 thru column 4 line 18 (and N.B. column 4 lines 16-18)), such that it would have been obvious to one of ordinary skill in this art to employ such a conventional pressure equalizing element for this its documented beneficial function and result in/in conjunction with the process of Rees et al., wherever deemed desirable and/or necessary.

12. Claim 18 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Rees et al. in view of Bascom et al.

Bascom et al. disclose that it is known to employ a vacuum in/in conjunction with a lamination process (involving the cure of a thermosetting resin adhesive film) in order to effect and obtain an improved (viz. void-free) bond (Abstract, page 1 lines 2-11 and 18-30, page 2 lines 4-5 and 17-18), such that it would have been obvious to one of ordinary skill in this art to employ such a conventional vacuum technique for its documented

beneficial function and result in/in conjunction with the process of Rees et al., wherever deemed desirable and/or necessary.

- 13. Claims 38-39 and 42-43 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rees et al. The specific shape that the uncured thermosetting resin impregnated fibrous bonding element takes is seen to be (a) dependent upon the shape of the substrates to be joined, the final desired structural configuration of the composite laminate produced etc.; and (b) therefore well within the purview of those of ordinary skill in this art to determine and employ in order to effect and achieve the desired result viz. adhesive bonding or lamination; further along this line, it is noted that changes in size or shape, without a special functional significance, are not patentable. (Research Corp. v. Nasco Industries Inc. 182 USPO 449).
- 14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. J. Gallagher whose telephone number is (703) 308-1971. The examiner can normally be reached on M-F from approximately 8:30 A.M. to 5 P.M. The examiner can also be reached on alternate N/A.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball, can be reached on (703) 308-2058. The fax phone number for this Group is (703) $\frac{305-3599}{305-3599}$.

Serial No. 09/761,301

Art Unit 1733

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0661/0662.

JJGallagher:cdc

September 5, 2002

JOHN J. GALLAGHER PRIMARY EXAMINER ART UNIT 191 / >33